United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR .	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,137	05/06/2004	Neil R. Wilson	H 50052 HST	7260
423 HENKEL COR	7590 02/06/200 PORATION	EXAMINER		
THE TRIAD, SUITE 200			CARRILLO, BIBI SHARIDAN	
2200 RENAISS GULPH MILLS			ART UNIT	PAPER NUMBER
	-,	•	1746	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	NTHS	02/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	10/840,137	.WILSON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Sharidan Carrillo	1746			
The MAILING DATE of this communication app	I .	_			
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was a failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
 1) Responsive to communication(s) filed on 13 No. 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allower closed in accordance with the practice under E. 	action is non-final.				
Disposition of Claims					
 4) Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) 19 is/are withdrawn from 5) Claim(s) 6 and 9 is/are allowed. 6) Claim(s) 1-5,7,8 and 10-18 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 19 are subject to restriction and/or election. 	rom consideration.	v.			
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite			

Art Unit: 1746

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 19 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Nº 1/0
- I. Claims 1-18, drawn to a method of flushing paint from a spraying device, classified in class 134, subclass 22.1.
- II. Claim 19, drawn to a method of painting substrates, classified in class427, subclass 421.1.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different modes of operation since the invention of Group II is directed to a method of painting substrates.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim19 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Art Unit: 1746

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 is indefinite because "paint delivery installation" lacks positive antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 3-5, 7, 10, 13, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergishagen et al. (5443748).

Bergishagen et al. teaches a method of cleaning paint covered surfaces of paint line tubes, paint line fixtures, and paint booths during a cleaning cycle using a composition comprising a polymeric material and an organic solvents (Abstract, col. 3, lines 35-43. Bergishagen et al. teach polymers including polyacrylamide, ethylene oxide polymers, and polyacrylic acid. The claim limitation of less than 5 weight percent water reads on no water present. Alternatively, col. 6, lines 25-29 teach 0.1 to 20% of

Art Unit: 1746

the polymer and from 80-99.9% by weight of the organic solvent. Bergishagen teaches in col. 4, lines 24-25, preferred aqueous based materials including water. Therefore the composition, based on the claimed ranges could include 80% organic solvent, 16% by weight of the polymer, and 4% by weight of the aqueous based solvent (i.e. water). col. 4, lines 1-17, Bergishagen et al teaches the solvent carrier can be an organic solvent. Re claim 1, the limitations of a spray-coating device is met since col. 4, lines 55-56 teaches using the mixture to clean lines, valves, and spray nozzles. The limitations of the polymer dissolved in the organic solvents throughout said contacting are met since Bergishagen teaches rinsing with a solution which dissolves the polymer (i.e. rheological material and organic solvent (col. 4, lines 63-65). Specifically, Bergishagen teaches removing the paint by contacting with a solution comprising a rinsing agent, polymer, and organic solvent. In reference to claims 1 and 15, the limitations of dispersing the paint are met since Bergishagen teaches the removal of the paint from the system. Dispersed, based on Webster's Dictionary, means to vanish and therefore, the removal of paint form the system reads on applicant's claimed invention. In reference to claims 3 and 13, the limitations are inherent properties of the composition. In reference to claim 4, refer to col. 4, lines 1-17. In reference to claim 5, refer to col. 3, lines 58-60. In reference to claim 7, refer to col. 4, lines 53-57. In reference to claim 10, Bergishagen et al teaches a polyacrylic acid. In reference to claim 15, the limitations are met since Bergishagen teaches the same polymer and is performing the same method steps as the claimed invention. Re claim 18, refer to col. 4, lines 55-57.

Art Unit: 1746

Claim Rejections - 35 USC § 103

Page 5

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1746

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergishagen et al. (5443748).

Bergishagen et al. is silent with respect to the type of paint removed. However, it would have been within the level of the skilled artisan to remove epoxy, polyurethane, or polyacrylamide resins since these paints are conventionally used in paint spray booths (4948513).

10. Claims 2, 11-12, 14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergishagen et al. (5443748) in view of Waldmann et al. (5294352).

Bergishagen et al. teach the invention substantially as claimed with the exception of the polymer having functional groups made of ammonium salts, phosphoric acids, amines, and a combination of an acid and an amine group.

Waldmann teaches a composition for detackification and removal of paint from paint spray booths. In col. 6 and 7 bridging and col. 9, Waldmann teaches polymer adduct compositions comprising functional groups of phosphoric acid (component A) and polyalkylamine (component b) and a tertiary ammonium salt group (component D).

It would have been obvious to a person of ordinary skill in the art to have modified the method of Bergishagen et al. to include polymers having various functional groups, as taught by Waldmann, for purposes of performing the same function of paint removal.

Allowable Subject Matter

11. Claims 6 and 9 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Art Unit: 1746

Response to Arguments

- 12. The rejection of claims 3 and 13, under 112, second paragraph, is withdrawn in view of applicant's arguments.
- 13. Applicant argues that Bergishagen fails to teach the polymer dissolved in the solvent. Applicant's arguments are unpersuasive for the following reasons. The examiner agrees that Bergishagen teaches introducing a gel into the paint system. However, Bergishagen teaches another embodiment. In particular, Bergishagen teaches cleaning the surface by a rinsing agent (col. 2, lines 55-63). In col. 2, lines 30-33, Bergishagen teaches that the rheological agent or additive (i.e. polymer) becomes soluble during the rinse cycle. In col. 4, lines 63-65, Bergishagen teaches that the solvent rinse will dissolve any rheological material to insure a cleaned system. Therefore, Bergishagen teaches further cleaning by rinsing the paint delivery system with a rheological material dissolved in an organic solvent.
- 14. Re claims 2, 11-12, 14, and 16-17, applicant argues that it would not have been obvious to the skilled artisan to modify Bergishagen by using the polymers to try to achieve applicant's invention since such attempt would result in a coagulating composition which would not disperse paint. Applicant's arguments are unpersuasive since Waldmann's composition disperses paint.
- 15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Forney teaches removing over-sprayed paint from spray booths using water dispersible polymers. Davis teaches a method of stripping paint. Mahoney

Art Unit: 1746

et al. and Ennis teach detackifying paint. Foster teaches treating pain booth water

systems.

16. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-

1297. The examiner can normally be reached on Monday-Wednesday, 6:00a.m-

3:30pm, with alternating Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo Primary Examiner

Page 8

Art Unit 1746

bsc

SHARIDAN CARRILLO PRIMARY EXAMINER